

SUPPORT FOR THE AMENDMENTS

Claims 1-26 were previously canceled.

Claims 27-50 have been amended.

The amendment of Claims 27-50 is supported by original Claims 1-26 and the corresponding previously pending claims.

No new matter has been added by the present amendment.

REMARKS

Claims 27-51 are pending in the present application.

The objections to Claims 27, 28, and 34, and rejection of Claims 27 and 28 under 35 U.S.C. §112, second paragraph, are obviated by amendment.

Applicants have amended the claims herein to address the Examiner's criticism of the claims. As such, these criticisms are believed to be moot.

Withdrawal of the objections and this ground of rejection is requested.

The object to the abstract is obviated by submission of a substitute abstract herewith. Withdrawal of this ground of objection is requested.

The rejections of:

- (a) Claims 27-34, 36-40, 42, 44, 46, and 50 under 35 U.S.C. §103(a) over Podszun in view of Neev;
- (b) Claim 35 under 35 U.S.C. §103(a) over Podszun in view of Neev and further in view of Kar;
- (c) Claim 41 under 35 U.S.C. §103(a) over Podszun in view of Neev and further in view of Melisaris and Kawasaki;
- (d) Claims 43, 48, and 49 under 35 U.S.C. §103(a) over Podszun in view of Neev and further in view of Bredt; and
- (e) Claim 47 under 35 U.S.C. §103(a) over Podszun in view of Neev and further in view of Melisaris-2,

are respectfully traversed.

The present invention improves upon existing methods heretofore employed in the process of laser-sintering (rapid prototyping) where typically a specific high-end laser (e.g., a CO₂ laser) is employed with a wavelength in the far infrared region (e.g., 10 600 nm). Thus, the claimed invention provides a method by which common lasers that generate electromagnetic radiation with a wavelength of from 100 to 3000 nm can be used. This method is made possible by using a specific absorber is selectively applied via an inkjet process to those regions to be melted of the respective layer.

Podszun is cited by the Examiner as disclosing a laser sintering method with a layer of a pulverulent substrate where a laser (e.g., Nd-YAG) with a wavelength of 500 to 1500 nm is used to sinter particulate plastic powders in a defined three-dimensional object and where an IR absorber is also employed. In the method disclosed by Podszun, controlled sintering is achieved by the selective melting by introduction of electromagnetic energy via a laser. However, at no point do Podszun disclose or suggest the selective application of the absorber by an ink jet process. The Examiner alleges that this deficiency is compensated for by Neev. Applicants disagree.

Specifically, Applicants submit that the presently claimed invention differs from the combined disclosures of Podszun and Neev with respect to the combination and sequence of the steps. In Neev, for example, a completely different method is claimed, wherein material is chopped or abraded, but not melted and built up in layered parts. Of equal importance, in Neev, the absorber is not applied with inkjet technology or is at least contained in a printable fluid, and the substrate is not pulverulent.

Thus, Podszun and Neev fail to provide any suggestion that their technology and processes could in any way be combined. The Examiner is reminded that to rely on a reference under 35 U.S.C. 103, it must be analogous prior art (MPEP 2141.01(a)).

Applicants submit that there is nothing analogous in the disclosed methods of Podszun and Neev. Indeed, for the reasons given above, the method of Neev is different from the claimed method and the method disclosed by Podszun in virtually every way. Accordingly, the skilled artisan would have had no reason to consider the disclosure of Neev together with the disclosure of Podszun, since these relate to completely different types of processes.

None of Kar, Melisaris, Kawasaki, Brecht, or Melisaris-2 cure this basic deficiency in the disclosures of Podszun and Neev. Therefore, even when Podszun and Neev are viewed together with Kar, Melisaris, Kawasaki, Brecht, and/or Melisaris-2, the claimed invention would still not be obvious.

Withdrawal of these grounds of rejection is requested.

Finally, Applicants respectfully request that the provisional obviousness-type double patenting rejections of Claims 27-30 and 36-50 over Claims 27-29 and 35-49 of co-pending U.S. 11/587,758 be held in abeyance until an indication of allowable subject matter in the present application. If necessary, a terminal disclaimer will be filed at that time. Until such a time, Applicants make no statement with respect to the propriety of this ground of rejection.

However, the Examiner is reminded that MPEP §804 indicates that: "If "provisional" ODP rejections in two applications are the only rejections remaining in those applications, the examiner should withdraw the ODP rejection in the earlier filed application thereby permitting that application to issue without need of a terminal disclaimer."

Applicants submit that the present application is now in condition for allowance.

Early notification of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, L.L.P.
Norman F. Oblon



Vincent K. Shier, Ph.D.
Registration No. 50,552

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 08/03)